

AMENDMENTS TO THE CLAIMS

Please ADD new claims 46-53:

1. (Previously Presented) A system for integrating a plurality of short-range communication protocols, the system comprising:

a signaling protocol for enabling an enhanced host controller to share use of an RF transceiver between a plurality of communication modules using a plurality of short-range communications protocols,

wherein the signaling protocol comprises,

a first parameter, which indicates currently enabled ones of the communication modules of the plurality of communication modules to which a host command may be directed, and

a second parameter, which indicates a priority order for sending the host command to each of the enabled ones of the communication modules indicated by the first parameter.

2. (Original) The system of claim 1, wherein the plurality of short-range communication protocols operate in a same frequency area.

3. (Original) The system of claim 2, wherein the frequency area is a 2.4GHz frequency band.

4. (Original) The system of claim 1, wherein the plurality of short-range communication protocols is selected from a group comprising a Bluetooth communication protocol, an LEE communication protocol and an RFID communication protocol.

5. (Original) The system of claim 4, further comprising:

a signaling protocol for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules using the LEE protocol.

6. (Original) The system of claim 4, further comprising:

a signaling protocol for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules using the RFID protocol.

7. (Canceled)

8. (Canceled)

9. (Original) The system of claim 1, wherein the enhanced host controller comprises at least one signaling protocol for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules employing at least one of the plurality of short-range communication protocols.

10. (Previously Presented) A communication device for integrating a plurality of short-range communication protocols, the device comprising:

an RF transceiver;

a plurality of communication modules;

a host capable of using an enhanced signaling protocol; and

an enhanced host controller in communication with the host and the plurality of communication modules, wherein the enhanced host controller employs the enhanced signaling protocol to enable use of the RF transceiver to be shared between the plurality of communication modules,

wherein the signaling protocol comprises,

a first parameter, which indicates currently enabled ones of the communication modules of the plurality of communication modules to which a host command may be directed, and

a second parameter, which indicates a priority order for sending the host command to each of the enabled ones of the communication modules indicated by the first parameter.

11. (Original) The device of claim 10, wherein the plurality of short-range communication protocols operate in a same frequency area.

12. (Original) The device of claim 11, wherein the frequency area for the plurality of short-range communication protocols is a 2.4 GHz frequency band.

13. (Original) The device of claim 10, wherein the plurality of short-range communication protocols is selected from a group comprising a Bluetooth communication protocol, an LEE communication protocol and an RFID communication protocol.

14. (Original) The device of claim 13, further comprising:

a signaling protocol for enabling the enhanced host controller to communicate with at least one of the communication modules using the LEE protocol.

15. (Original) The device of claim 14, wherein the enhanced host controller translates information received from the communication module using the LEE protocol into a readable format for the host.

16. (Original) The device of claim 13, further comprising:

a signaling protocol for enabling the enhanced host controller to communicate with a communication module using the RFID protocol.

17. (Original) The device of claim 16, wherein the enhanced host controller translates information received from the communication module using the RFID protocol into a readable format for the host.

18. (Original) The device of claim 10, wherein the device is one of a cellular phone, laptop computer or a PDA.

19. (Original) The device of claim 10, wherein the enhanced host controller comprises at least one signaling protocol for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules employing at least one of the plurality of short-range communication protocols.

20. (Previously Presented) A method of communicating between a first device and a second device, the first device having an enhanced host controller to share use of an RF transceiver between a plurality of communication modules using a plurality of short-range communications protocols, the method comprising:

selecting a communication module, in the first device, to transmit a wireless communication to the second device; and

transmitting the wireless communication, from the first device, to the second device within the first device's radio range,

wherein the communication module is selected according to a first parameter, which indicates currently enabled ones of the communication modules of the plurality of communication modules to which a host command may be directed, and a second parameter, which indicates a priority order for sending the host command to each of the enabled ones of the communication modules indicated by the first parameter.

21. (Original) The method of claim 20, wherein the communication module is selected according to a first parameter, wherein the first parameter indicates which of the plurality of communication modules is to be selected.

22. (Original) The method of claim 20, further comprising:
receiving, at the first device, a wireless communication from the second device;
and
processing, at the first device, the wireless communication.

23. (Previously Presented) A system for integrating a plurality of short-range communication protocols, the system comprising:

a processor;
a memory, communicatively connected to the processor;
a program stored in the memory, including,
a module for enabling an enhanced host controller to share use of an RF transceiver between a plurality of communication modules using a plurality of short-range communications protocols, wherein the module comprises a first parameter, which indicates the plurality of communication modules to which a host command may be directed and a second parameter, which indicates a priority order for sending the host command to each of the plurality of communication modules in the first parameter.

24. (Original) The system of claim 23, wherein the plurality of short-range communication protocols operate in a same frequency area.

25. (Original) The system of claim 24, wherein the frequency area for the plurality of short-range communication protocols is a 2.4 GHz frequency band.

26. (Original) The system of claim 23, wherein the plurality of short-range communication protocols is selected from a group comprising a Bluetooth communication protocol, an LEE communication protocol and an RFID communication protocol.

27. (Original) The system of claim 26, further comprising:
a module for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules using the LEE protocol.

28. (Original) The system of claim 26, further comprising:
a module for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules using the RFID protocol.

29. (Canceled)

30. (Canceled)

31. (Original) The system of claim 23, wherein the enhanced host controller comprises at least one signaling protocol for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules employing at least one of the plurality of short-range communication protocols.

32. (Previously Presented) A system for integrating a plurality of short-range communication protocols, the system comprising:

means for enabling an enhanced host controller to share use of an RF transceiver between a plurality of communication modules using a plurality of short-range communications protocols wherein said means comprises a first parameter, which indicates the plurality of communication modules to which a host command may be directed and a second parameter, which indicates a priority order for sending the host command to each of the plurality of communication modules in the first parameter; and

means for enabling the enhanced host controller to communicate with at least one of the plurality of communication modules employing at least one of the plurality of short-range communication protocols.

33. (Original) The system of claim 32, wherein the plurality of short-range communication protocols operate in a same frequency area.

34. (Original) The system of claim 33, wherein the frequency area for the plurality of short-range communication protocols is a 2.4 GHz frequency band.

35. (Original) The system of claim 32, wherein the plurality of short-range communication protocols is selected from a group comprising a Bluetooth communication protocol, an LEE communication protocol and an RFID communication protocol.

36. (Canceled)

37. (Canceled)

38. (Previously Presented) The system of claim 1, wherein the plurality of communication modules comprises at least three substantially concurrently operating communication modules.

39. (Previously Presented) The system of claim 1, wherein priority indicated by the second parameter provides an order of operation for the enabled communication modules.

40. (Previously Presented) The system of claim 23, wherein the plurality of communication modules comprises at least three substantially concurrently operating communication modules.

41. (Previously Presented) The system of claim 23, wherein priority indicated by the second parameter provides an order of operation for the enabled communication modules.

42. (Previously Presented) The system of claim 32, wherein the plurality of communication modules comprises at least three substantially concurrently operating communication modules.

43. (Previously Presented) The system of claim 32, wherein priority indicated by the second parameter provides an order of operation for the enabled communication modules.

44. (Previously Presented) The system of claim 1, wherein the host command is received from a Bluetooth host.

45. (Previously Presented) The system, of claim 1, wherein the currently enabled ones of the communication modules include each of a Bluetooth, a LEE MAC and an RFID communication module and the priority order of the second parameter indicates, sending the host command to the RFID communication module prior to sending the command to either the LEE MAC communication module or the Bluetooth communication module, and sending the host command to the LEE MAC communication module prior to sending the command to the Bluetooth communication module.

46. (New) The system of claim 1, further comprising an enhanced host controller, wherein the enhanced host controller is configured to modify the host command to one or more commands suitable for use by one or more of the communication modules indicated by the first parameter based on the priority order indicated by the second parameter.

47. (New) The communication device of claim 10, wherein the enhanced host controller is configured to modify the host command to one or more commands suitable for use by one or more of the communication modules indicated by the first parameter based on the priority order indicated by the second parameter.

48. (New) The communication device of claim 10, wherein for each communication module indicated as currently enabled by the first parameter, the enhanced host controller, prior to sending the host command to a respective one of the enabled communication modules in accordance with the priority order indicated by the second parameter, modifies the host command to a command suitable for use by the respective one of the communication modules, if the host command otherwise is unsuitable for use by the respective one of the communication modules.

49. (New) The communication device of claim 48, wherein the host command is a Bluetooth command and the enhanced host controller modifies the Bluetooth command to at least one of an RFID command and a LEE MAC command that satisfies the Bluetooth command for use by a currently enabled RFID communication module and a currently enabled LEE MAC communication module, respectively.

50. (New) The communication device of claim 48, wherein the host command is unsuitable for use by any of the communication modules indicated by the first parameter as currently enabled.

51. (New) The method of claim 20, further comprising modifying the host command to one or more commands suitable for use by one or more of the communication modules indicated by the first parameter based on the priority order indicated by the second parameter.

52. (New) The system of claim 23, wherein the module is configured to modify the host command to one or more commands suitable for use by one or more of the communication modules indicated by the first parameter based on the priority order indicated by the second parameter.

53. (New) The system of claim 32, further comprising means for modifying the host command to one or more commands suitable for use by one or more of the communication modules indicated by the first parameter based on the priority order indicated by the second parameter.